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Monthly Meetings

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Since its inception in 1999, the Washington, D.C., Area Computer-Aided Surgery Society (WashCAS) has become the major vehicle in the Washington/Baltimore area for exploring the issues in the emerging field of computer aided surgery and related technologies.

Key accomplishments of the society to date are:

- Has held meetings every other month since 1999, featuring many of the nation's leading experts on computer aided surgery and related topics.
- Has brought together representatives from local funding agencies and universities including NIH, NSF, NRL, the Navy Medical Center, Walter Reed, and Fort Detrick. Participating universities have included Georgetown, George Washington, George Mason, Catholic, and Johns Hopkins, among others.
- While the great majority of the meetings have been held at the National Library of Medicine, we have also held meetings at Georgetown, George Washington, and the University of Maryland.
- Established a web site (www.washcas.org) to disseminate information, including abstracts of all the talks to date and links to local research groups.

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4 Introduction

The Washington, D.C., Area Computer-Aided Surgery Society (**WashCAS**) has become the major vehicle in the Washington/Baltimore area for exploring the issues in the emerging field of computer aided surgery and related technologies. The society is intended to bring together physicians, scientists, and engineers to discuss computer applications in surgery, including image-guided surgery, medical robotics, medical imaging, surgical simulation, teleradiology, and other related topics. Meetings with keynote speakers are held every other month.

The Society was founded in the summer of 1999 and has held 21 meetings to date, with an average of 40 attendees at each meeting. Attendees have included representatives from university, commercial, and government entities (including USUHS, MRMC, WRAMC, NIH, FDA, and NLM). Since the fall of 2000, the society has been funded by the Telemedicine and Advanced Technology Research Center (TATRC) of the U.S. Army Medical Research and Materiel Command (USAMRMC). This funding has allowed us to recruit internationally known speakers as well as provide food before the meetings (an essential element since most people come directly from the office for the 7 pm talks).

The vast majority of the meetings have been held at the National Library of Medicine (NLM) on the NIH main campus. NLM has a first-class conference room at the Lister Hill Center. These facilities have been made available to us at no charge and this has enabled us to spread out our initial funding for several years. The primary source of society information is the website at www.washcas.org. The society is run by volunteers, and no salary support has been charged to the grant. In short, we believe the government has received excellent value for the funds expended.

The society organizers are:

- President: James Burgess, MD, Inova Fairfax Hospital
- Treasurer: Gerry Higgins, PhD, Simquest
- Secretary: Kevin Cleary, PhD, Georgetown University
- Local host: Terry Yoo, PhD, National Library of Medicine

5 Report Body

This report covers the period from 01 October 2000 to 30 September 2003. The award number is DAMD17-00-1-0723.

As stated in the reporting requirements on the USAMRMC web site, the report body is to “describe the research accomplishments associated with each task in the statement of work”. Since this award is to support the WashCAS meetings, there are no research accomplishments to report. Instead, in this section, we provide a list of the meetings to date in Table 1.

Table 1. WashCAS Seminar Speakers

| Date | Speaker | Title |
|--------------|------------------------------------|---|
| 29 July 2003 | Pierre Vieyres | Mobile Tele-Echography using an Ultra-Light Robot |
| 20 May 2003 | Peter Basser | Diffusion Tensor Imaging |
| 21 Jan 2003 | Kenneth Salisbury | Enhancing Surgery Through Robotics and Automation |
| 19 Nov 2002 | Carl Jaffe | Frontiers in Vascular Imaging |
| 17 Sept 2002 | Mandayam Srinivasan | Haptics and Surgical Simulation |
| 16 Apr 2002 | Michael Ackerman Brett Peterson | Health Information and the Next Generation Internet Network Enhanced Collaboration in Biomedical Technology Centers |
| 19 Feb 2002 | Allison M. Okamura | Vision Assisted Control for Manipulation |
| 11 Dec 2001 | Lawrence J. Hettinger | Human Performance Considerations in Medical Systems |
| 23 Oct 2001 | King Li | Biomedical Imaging in the New Millennium |
| 17 July 2001 | Robert Galloway Jr. | Advances in Technology-Guided Therapy at Vanderbilt |
| 15 May 2001 | Elizabeth Bullitt | Patient-Specific Vascular Models for Surgical Applications |
| 20 Mar 2001 | Charles Richardson | Fused Deposition Modeling for Surgical Support |
| 16 Jan 2001 | Michael Miller | Computational Anatomy |
| 14 Nov 2000 | James Duncan | Use of Geometrical and Physical Models in Image Analysis |
| 19 Sept 2000 | Ron Kikinis | Surgical Planning Laboratory |
| 18 July 2000 | Richard Swaja | Bioengineering, Bioimaging, and Bioinformatics at the NIH |
| 30 May 2000 | Larry Clarke | New Resources Within NIH/NCI for Imaging Technology |
| 28 Mar 2000 | Brian Athey | Visualization & Manipulation of Visible Human Datasets |
| 18 Jan 2000 | Richard Bucholz | Computer Aided Surgery to Information Guided Therapy |
| 16 Nov 1999 | Clay Easterly | The Virtual Human Initiative |
| 13 Sept 1999 | Russell Taylor | Computer-Integrated Surgery |

6 Key Research Outcomes

This section is intended to provide a bulleted list of key research accomplishments. Since this is not a research grant, instead we list some of the accomplishments of the WashCAS organization.

- Has held meetings every other month since 1999, featuring many of the nation's leading experts on computer aided surgery and related topics.
- Has brought together representatives from local funding agencies and universities including NIH, NSF, NRL, the Navy Medical Center, Walter Reed, and Fort Detrick. Participating universities have included Georgetown University, George

Washington University, George Mason University, Catholic University, and Johns Hopkins University, among others.

- While the great majority of the meetings have been held at the National Library of Medicine, we have also held meetings at Georgetown University, George Washington University, and the University of Maryland.
- Established a web site (www.washcas.org) to disseminate information, including abstracts of all the talks to date and links to local research groups.

7 Reportable Outcomes

This section provides a list of reportable outcomes.

The major reportable outcome is the archive of WashCAS talks over the past three years. This are listed on the WashCAS web site at:

<http://www.washcas.org/events.html>

Many of the talks have been recorded by the National Library of Medicine and are available on their web site at:

<http://collab.nlm.nih.gov/webcastsandvideos/washcas/washcas.html>

8 Conclusions

The Washington Area Computer Aided Surgery Society (WashCAS) has become the major vehicle for interaction among researchers in this field and related fields in the Washington-Baltimore area. This would not have been possible without the funding provided by this award. The society has held meetings every other month since 1999, with an average attendance of 40 people. Based on input from the participants, the organizers plan to continue in this manner, and welcome suggestions from all concerned parties as to how the society can best achieve its mission to promote the field.